Tire and Gear Ratio Chart

TIRE DIAMETER	GEAR RATIO														
	3.07	3.21	3.31	3.42	3.55	3.73	3.91	4.11	4.27	4.56	4.88	5.13	5.29	5.38	5.71
26	2579	2696	2780	2873	2982	3133	3284	3452	3587	3830	4099	4309	4444	4519	4796
27	2483	2597	2677	2766	2872	3017	3163	3325	3454	3689	3947	4150	4279	4352	4619
28	2395	2504	2582	2668	2769	2909	3050	3206	3331	3557	3806	4001	4126	4196	4454
29	2312	2417	2493	2576	2674	2809	2945	3095	3216	3434	3675	3863	3984	4052	4300
30	2235	2337	2410	2490	2584	2715	2846	2992	3109	3320	3553	3735	3851	3917	4157
31	2163	2261	2332	2409	2501	2628	2755	2896	3008	3213	3438	3614	3727	3790	4023
32	2095	2191	2259	2334	2423	2546	2669	2805	2914	3112	3331	3501	3610	3672	3897
33	2032	2124	2191	2263	2349	2469	2588	2720	2826	3018	3230	3395	3501	3561	3779
34	1972	2062	2126	2197	2280	2396	2512	2640	2743	2929	3135	3295	3398	3456	3668
35	1916	2003	2065	2134	2215	2328	2440	2565	2664	2845	3045	3201	3301	3357	3563
36	1862	1947	2008	2075	2154	2263	2372	2493	2590	2766	2961	3112	3209	3264	3464
37	1812	1895	1954	2019	2095	2202	2308	2426	2520	2692	2881	3028	3123	3176	3370
38	1764	1845	1902	1966	2040	2144	2247	2362	2454	2621	2805	2948	3040	3092	3282
39	1719	1798	1854	1915	1988	2089	2190	2302	2391	2554	2733	2873	2962	3013	3198
40	1676	1753	1807	1867	1938	2037	2135	2244	2331	2490	2664	2801	2888	2937	3118
41	1635	1710	1763	1822	1891	1987	2083	2189	2275	2429	2599	2733	2818	2866	3042
42	1596	1669	1721	1778	1846	1940	2033	2137	2220	2371	2538	2668	2751	2798	2969
43	1559	1630	1681	1737	1803	1894	1986	2087	2169	2316	2479	2606	2687	2733	2900
44	1524	1593	1643	1698	1762	1852	1941	2040	2119	2263	2422	2545	2626	2670	2834

Lets say you have 31" tires and stock 3.07 gears. Looking at the chart, you are not even in the power or economy range! Your tires are too big for your gears! Now, we need to figure out what gears you should have.

Desire: Good fuel economy
3.42 gears would put you at the low end of the chart, giving the best economy.
3.55 gears would keep some of the economy, but add a touch more low end power.

Desire: Fuel economy and low end power
3.91 gears would give a good balance of both, but 4:27 gears would have more power at the cost of some economy. In this situation, a set of 4:10 gears would most likely be the best setup.

Desire: Low end power
4.56 gears would increase your low end power at the cost of economy, and 4.88 gears would go one step further. in that direction.

Some Basic Rules

The higher the gear number, the lower the gear. This means more power at the expense of fuel economy. 3.73 is a higher number than 3.07, but a lower gear ratio.

The lower the gear number, the higher the gear. This means a loss of power with the benefit of greater fule economy. 3.07 is lower than 3.55, but has a higher gear ratio.

Suggested Gears for Tires

3.08 gears for 28" tires
3.42 gears for 29" tires
3.73 gears for 31" tires

4.10 gears for 33" tires
4.38 gears for 35" tires
4.56 gears for 38" tires
4.88 gears for 40" tires
5.13 gears for 42" tires
5.38 gears for 44" tires

Common RPO codes and Gear Ratios

GU1 = 2.41
GU2 = 2.73
GU3 = 2.93
GU4 = 3.08
GU5 = 3.23
GU6 = 3.42

How to Calculate Gear Ratio

Count the teeth on ring and pinion gears.
Divide the tooth count of ring gear by the tooth count of pinion gear (carry out to 2 decimal points).
Example: 41 tooth ring gear divided by a 10 tooth pinion gears yields a 4.10:1 axle ratio.
This means that the drive axle rotates 4.10 times for every 1 rotation of your tire.

Estimating the axle ratio from tire rotations:
Axle ratio may be determined by counting the wheel and drive shaft rotations.
Jack up the rear and place jack stands under your axle.
Mark the tire edge (bottom) and a spot on the drive shaft so can see it as it rotates.
Rotate the tire until it makes exactly one rotation (360°).
Count drive shaft turns as the tire rotates.
3 turns on the drive shaft indicates a 3.08:1
3 ¾ turns on the drive shaft indicates 3.73:1
Just under 3 ½ turns on the drive shaft indicates 3.42:1
3 ½ turns on the drive shaft indicates 3.55:1
4 drive shaft turns consider 4.10:1
4 ¼ turns consider 4.27:1
5 1/3 indicates 5.38:1

Sources

An excelent source I found is:
Drivetrain Warehouse
1-800-432-7656 - Open 7 days a week!
Please tell them you found them on this site!

West Coast Differntials - 1-888-260-0950
www.differentials.com
M-F 8a - 12p & 1p - 5p PST

Randy's Ring & Pinion
1-888-285-4680
Mon - Fri 8a - 12p & 1p - 5:30p PST